FINAL REPORT

Project and Title : USAID-Philippine Tuberculosis Initiatives for the Private Sector
"Implementation of the Medical Professional Societies' Action Plans -- Tuberculosis Initiatives for the Private Sector"

Authors and
Members of the Team : Renato B. Dantes, MD, Team Leader
: Vincent M. Balanag, Jr., MD (for PCP, PCCP, PSMID)
: Salvacion R. Gatchalian, MD (for PPS)
: Melchor R. Lucas, Jr., MD (for PAFP and PCOM)

Participating Agencies : Philippine Coalition Against Tuberculosis (PhilCAT)
Philippine Academy of Family Physicians (PAFP)
Philippine College of Chest Physicians (PCCP)
Philippine College of Occupational Medicine (PCOM)
Philippine College of Physicians (PCP)
Philippine Pediatric Society (PPS)
Philippine Society of Microbiology and Infectious Diseases (PSMID)
Philippine Tuberculosis Initiatives for the Private Sector (PhilTIPS)
Philippine Health Insurance (PhilHealth)
National Center for Disease Prevention & Control, Department of Health
United States Agency for International Development (USAID)

ABBREVIATIONS

DOH = Department of Health

DOTS = Directly Observed Treatment Short-Course Strategy

OSHC = Occupational Safety and Health Center

PAFP = Philippine Academy of Family Physicians

PCP = Philippine College of Physicians

PCCP = Philippine College of Chest Physicians

PCOM = Philippine College of Occupational Medicine

PhilCAT = Philippine Coalition Against Tuberculosis

PhilTIPS = Philippine Tuberculosis Initiative for the Private Sector

PPS = Philippine Pediatric Society

PSMID = Philippine Society of Microbiology and Infectious Diseases

STTA = Short-Term Technical Assistance

TB = Tuberculosis

USAID = United States Agency for International Development

WHO = World Health Organization

USAID – Philippine Tuberculosis Initiatives for the Private Sector

" Implementation of the Medical Professional Societies' Action Plans Tuberculosis Initiatives for the Private Sector"

FINAL REPORT

This Final Report is being submitted in compliance with the initial reporting requirements under the scope of work (SOW) governing this short-term consultancy engagement *(Data Source 1)*. This report includes description of the deliverables as mentioned in the Inception Report *(Data Source 2)* based on the Action Plans formulated in Cebu by the different Professional Societies *(Data Source 3)* , the activities undertaken to work for these deliverables, description on how these deliverables contribute to the ultimate objective of involving the professional medical societies in the TB DOTS program of the National Tuberculosis Program. Recommendations on how the professional medical societies can further be engaged in the NTP program are also provided.

I. INTRODUCTION

In 1996, the Philippine government adopted the directly observed treatment short-course (DOTS) strategy, a World Health Organization (WHO)- management protocol for tuberculosis (TB).

The WHO assessment of the Philippine National Tuberculosis Program (NTP) in 2002 showed that TB detection rate has reached 57% while treatment success rates have consistently exceeded the targets from 1998 to 2000.

To achieve the global and national targets of 70% TB detection rate and 85% treatment success rates, it has become imperative to involve deeply the private sector in TB control in the country.

The Philippine Tuberculosis Initiatives for the Private Sector (PhilTIPS), a three year project funded by the United States Agency for International Development (USAID), complements the efforts of the government in TB control by establishment of partnerships between the government and private sectors to improve and standardize TB diagnosis and treatment in the latter through DOTS. The project aims to achieve an 85% TB treatment success rate for cases in the private sector where the project will have direct intervention.

In line with this effort to promote DOTS in the private sector, and, in addition, to ensure and enhance quality DOTS implementation, Philippine TIPS, in collaboration with the Philippine Coalition Against Tuberculosis and the Department of Health, has extended technical assistance and support to translate into concrete activities the covenants of the six medical professional societies that were signed in August-October 2003 *(Data Source 4)*. The six societies include: (1) Philippine Academy of Family Physicians; (2) Philippine College of Chest Physicians; (3) Philippine College of Occupational Medicine; (4) Philippine College of Physicians; (5) Philippine Society of Microbiology and Infectious Diseases; and the (6) Philippine Pediatrics Society. Each of these societies has its respective chapters strategically located throughout the Philippines which can be the focus and initiator of efforts to promote Public-Private Mix (PPM) DOTS or establishment of local TB coalition in the area.

Through these covenants, the professional societies have committed to actively involve their members in the provinces in establishing partnerships and coalitions with the Department of Health, local PhilCAT affiliates, other medical professional societies, pharmaceutical industry supporters and Philippine TIPS among others. In particular these cover (1) trainings, enhancement courses, workshops, seminars and conventions; (2) participation in continuing quality improvement of DOTS services and (3) resource generation for information dissemination, trainings and research activities.

An action planning workshop was conducted in Cebu City in October 2004. The Action Plans outlined the specific activities of each society that were to strengthen and expand their participation in TB prevention and control using DOTS.

With the 6 Action Plans of the Societies ready for implementation, it was deemed necessary to provide continuing support and help institutionalize mechanisms within and amongst the Societies and with PhilCAT and DOH. These would facilitate the implementation of the activities in the Action Plans and ultimately institutionalize the conduct of DOTS and DOTS-related activities within the societies respective programs and activities.

PhilCAT, as one of the members of the Philippine TIPS consortium, was designated to shepherd the continuing DOTS initiatives for the private sector partners beyond the life of the Philippine TIPS project. As such PhilCAT through a Subcontract was tapped to spearhead the implementation of these Action Plans through an Short-Term Technical Assistance (STTA) project.

Objectives and Scope

This short-term technical assistance (STTA) is consistent with the PhilCAT subcontract as well as with the different Tasks of the Philippines TIPS Project (e.g. research, model development, training, certification and communication among others). The consultants of this STTA were tasked to (1) help the 6 medical professional societies **implement their respective plans** (as laid down in the Action Plans formulated in the Cebu workshop) and (2) ensure that the technical and other infrastructures necessary to **institutionalize the activities** within the programs of the respective societies were put in place.

Plan of Work and Timetable

The workplan for this short term technical assistance was divided into 2 phases (as laid down in the Inception Report).

Phase 1 : Planning Phase

The planning of actual activities was preceded by a review of the Action Plans as contained in the Final Report on the Project entitled " Implementation Plan for the Covenants with professional Societies Tuberculosis Initiatives for the Private Sector". A meeting with the heads or representatives of the 6 different specialty organizations was then carried out to confirm the commitments of their board and members to the Covenant and get an update on what has happened since the Action Plans were formulated in Cebu last year.

Also reaffirmation with PhilCAT, DOH and PhilTIPs of the support they would provide to the societies in carrying out the activities outlined in the Action Plans was done.

Then the members of the STTA team conducted a planning workshop in consultation with 6 medical societies and the supporting organizations with the output presented subsequently to heads of PhilCAT and PhilTIPs.

The activities involved in Phase 1 were as follows:

1. Meet and consult with heads/representatives of different specialty organizations and supporting organizations

2. Plan in detail the specific activities to be carried out for the effective implementation of the Action Plans of each medical society. This included the timetable and resources needed for the activities with source of the support being identified. **Only activities that were feasible to do during the period of April – August 2005 were included.**

Timeframe: March- April 2005

Deliverable:

A detailed tabulated workplan of all the activities that would be carried out from April- August 2005 - This included the sequence of activities to be carried out for each action plan together with the resources to be generated from the PhilTIPs and from the concerned medical society and the timelines for carrying out these activities *(Data Source 2).*

Phase 2: Implementation and Monitoring Phase

Activity

To execute the plans as laid out in the detailed planning and monitor the execution of these activities

Timeframe: April – August 2005

Deliverable

1. A progress report on the execution and monitoring of these plans *(Data Source 5)*
2. A final report on the implementation of the detailed workplan

II. ACCOMPLISHMENT REPORT

A tabulated summary of the expected activities laid down in the Inception Report and the actual activities carried out is shown in Annex 1.

A. Philippine Academy of Family Physicians (PAFP)

The family physician's practice is generally clinic-based and covers adult and pediatric medicine. Patients at the early onset of illness as well as those in their full blown clinical

stage consult with them. As such, the family physician is exposed to a wide mix of patients.

In the case of their TB patients, they present special characteristics that need to be addressed to ensure successful treatment. First, the treatment of TB involves a prolonged period of time, and second it requires strict compliance by the patient with the regimen. Third, the disease is communicable and thus once it is identified, there is a need to further search for other cases within the household of the patient or within his living environment. Fourth, most patients come from the lower economic sector of the society and may not afford the cost of the complete treatment. Fifth, prevention of the disease would require health education techniques which are effectively delivered by a physician.

In crafting the action plan, the PAFP had those conditions in mind. The project must enhance the clinical practice of a family physician and a technology needs to be developed to successfully treat a TB case.

The family physicians' strength lies in their ability to involve the family in the management of their patients. This is where the action plan of the PAFP stems from and thus the activities revolve around testing the "family approach" in the management of TB cases.

Generally the family approach is described as: "Enlisting the family of the index patient in the program. The dominant key members of the families shall be identified and made allies of the Family Physicians. Families under the care of the program shall be organized and shall be made partners of the PAFP chapter in the implementation of the activities. The project will be analyzed applying the concept of Family Medicine."

The family approach is a skill which is inherent in the practice of family medicine. In using this approach, the family physician is assured that the TB patient complies with the treatment regimen through a family member monitoring the patient's intake of drugs. Case finding is strengthened by having the family identify other members with similar

symptoms. The complete drug regimen is assured by enrolling the patient in the NTP program. And lastly, cases that are more difficult to treat are referred to the appropriate facilities.

There are two parts of the action plan. The first one is setting up the components of the NTP program in a private health care setting. These components are: training of referring physicians on basic DOTS, training of MDs and nurses as DOTS providers, training of medical technologists as sputum microscopists and setting up the PPMD units. The second part is the research component using the family approach to complement the NTP program in the private health care setting. The research will determine if indeed the family approach is effective in enhancing the DOTS and case holding the patient, and in further identifying TB cases among the family/relatives/neighbors. It will also provide information if family members, when well oriented by a physician, would become effective treatment partners. The results of the pilot project will be documented and the process improved. Once this is done expansion to provinces will be undertaken by other chapters.

The program will start as a pilot project in the research area in San Pedro, Laguna.

ACTIVITIES/RESULTS

I. Research on family approach to TB treatment.

The objective of the research is to describe a strategy and outcome in the treatment of tuberculosis among families. The specific objectives are: to characterize the common course of tuberculosis among families, to describe the treatment result, to describe the use of Family Approach in the management of tuberculosis, and to describe the DOTS as its complementary strategy.

The research aims to establish common descriptions of tuberculosis, its course, overall factors involved in its management and the use of family approach in its resolution.

In order to achieve the objectives stated above, the PAFP shall establish pilot areas, initially in the first district of Laguna. This pilot shall be documented following a research design.

The activities under this component are:

a. The development of a research protocol – This will be contained in a manual which will include the family approach guidelines in the management of adult TB patient and the NTP diagnosis and management of pediatric cases.
b. Training of DOTS providers – The provider's training is meant to support the establishment of the Public-Private Mixed DOTS unit in a private health facility setting. The project intends to establish two PPMD units in the province of Laguna – one in St James Hospital in Cabuyao and the other in Divine Mercy Hospital in San Pedro. There will be a set of one doctor and one nurse trained as provider and one medical technologist trained as sputum microscopist for each of the sites.
c. Training of referring physicians – The family physicians practicing in the locality will be trained in basic DOTS and will become the referring physicians of the two PPMD units. They will also be source of data for the research.

The results under this component:

a. The research protocol that was expected to result from this undertaking has been completed. *(Please see Annex 2).* A workshop to review the research protocol for consistency with revised TB manual of procedures and pediatric protocol was held on May 6, 2005 at the PAFP office. Resource persons who were unable to attend the workshop e-mailed their comments that were subsequently incorporated into the manual.

b. Training for DOTS providers – Two doctors and two nurses were trained as providers to the National Tuberculosis Control – DOTS . Likewise, three medical technologists were trained in Direct Sputum Microscopy. The trained personnel fulfills the requirement of DOH and PhiCAT for certification of the PPMD units

Attendance to the training for DOTS providers in the private and public sectors

Date	Doctor	Nurse
April 20-22, 2005	Dr Rodel Q. M. Aquino	Ms. Zenaida B Tams
August 10-12, 2005	Dr Ruperto Villarta	Ms Edith Casacop

Attendance to the Basic Training in Direct Sputum Microscopy

Date	Medical Technologist
July 4-8, 2005	Carissa Beth B. Remolacio,
July 4-8, 2005	Estella C. Manlogon
July 4-8, 2005	Leodegario R Limcuando

c. Training for participating physicians. Twenty eight medical practitioners based in Laguna were given training on Basic DOTS last May 25, *2005 (Please see Annex 3).* The same physicians were oriented on the family approach on the same day (May 25). Another training to be conducted in October 23, 2005 is being organized to expand the number of DOTS referring physicians in the pilot area.

II. Adoption of adult and pediatric TB Consensus and inclusion of such Consensus in the resident's training curriculum and board exams.

The PAFP agreed including the adult and pediatric TB Consensus in their residency training curriculum and board exams. *A board resolution will be passed in October or November, 2005 to effect this commitment (Please see Annex 4).*

III. Training of referring physicians.

The training of more PAFP doctors to become referring physicians will be done through PCOM's organized training. The PCOM has organized five trainings in different sites

and has provided PAFP with the training schedule. In response, PAFP wrote its chapters to encourage its membership to attend these trainings.

IV. Establishment of the PPMD units

To implement the practice of NTP-DOTS and the research on the family approach, PPMD units need to be established in the pilot area. These units will serve as the diagnostic and treatment resource where trained sputum microscopist and NTP providers are located. The family physicians who are participating in this research will refer their patients to these units. Thereafter, they will engage the families of these patients to participate in the family approach project.

The PAFP conducted meetings and interviews to prepare the two sites for certification. They were assisted by the Rural Health Physician of San Pedro Laguna, Dr Ogcimer of CHD IV, and Dr Roger Ilagan of PhilTIPS. The self assessment guidelines were used in the preparation of the units. The initial visit by DOH was conducted in September 2, 2005. The target date for final assessment and subsequent certification will be on October 15, 2005.

V. Study on the effect of the Basic DOTS training on the knowledge of Family Physicians

The PAFP conducted a study to determine if the Basic DOTS training improved the knowledge of Family Physicians. They carried this out last May 25, 2005. The objective in doing this is to fine tune the BASIC DOTS training curriculum to fit the practice of family medicine. The PAFP feels that there are some topics which need more emphasis in training family medical practitioners. For example, there have been expressions for a more detailed discussion of the treatment of TB patients with co-morbid conditions and the treatment of patients who have adverse drug reactions. They also wanted to know how to effectively refer patients who are TB symptomatics and with x-ray findings but with sputum negative results including the proper referral of patients who are MDR.

As the PAFP expands their program to other provinces on the use of the family approach in the care of TB patients, the result of the baseline study would be very useful in the re-design of the training course.

An initial result of this study will be submitted on September however since the PAFP would like to expand the number of respondents to the study. The final survey will be done on October 23 and the results will be submitted by the end of October 2005.

B. Philippine College of Chest Physicians (PCCP)

1. Updating of the TB Consensus (in common with the PSMID)

The 3 Technical Working Groups *(Annex 5)* did electronic and manual search of the medical literature on their assigned topics. Relevant articles were retrieved, and copies were distributed to members for evaluation and grading of level of evidence. Each group decided on their system of grading. Each of the 3 Technical working groups held several separate meetings to discuss the progress of the work and plan subsequent activities . These meetings were supported by funds provided by a pharmaceutical company (Medichem).

The 3 Technical Working Groups presented their initial outputs in a joint meeting at the Via Mare in Malate attended by Dr. Dantes (Steering Committee), Dr. Charles Yu (advisory committee) and their respective members. Revisions were made based on the comments and suggestions of the attendees.

Another presentation was made by the 3 Technical Working Groups in a joint meeting at the Dome in Makati City and this was attended by Dr. Thelma Tupasi (Advisory Committee), and Drs. Dantes and Jaime Montoya (Steering Committee). Dr. Tupasi and Montoya made suggestions that were incorporated into the respective reports of the 3 groups.

The initial draft of the entire TB Consensus, a product of the Technical Working Groups with comments from the Advisory Committee was presented on August 17, 2005 during the PhilCAT Annual Convention held at the Kachina Room of the Century Park Hotel. The session was well-attended by members of the participating societies (PCCP, PSMID, PAFP) and the DOH. Several important issues were the focus of the discussion, particularly on the role of the chest x-ray, tuberculin testing and treatment of latent TB infection. It was unfortunate that the allotted time was not sufficient for a thorough

discussion of the important issues and the attendees was asked to e-mail their comments and suggestions to the Consensus Secretariat.

As regard the funding of the activities, several pharmaceutical companies were approached for assistance. It was fortunate that several companies, notably Medichem, Wyeth and Natrapharm donated cash to defray some of the expenses incurred. PSMID and PCCP also agreed to provide additional funding or assistance.

Following the request from the Executive Boards of PSMID and PCCP, A memorandum of agreement was crafted by the Steering Committee to delineate the duties and obligations, as well as the rights of the parties in the TB Consensus project .

The technical working groups are scheduling a final plenary meeting of all committees, including the Consensus Group, during the 3rd week of October 2005 to allow for voting of the members on the consensus statements *(Annex 6).* After this meeting, the final draft report will made and submitted to PhilCAT and USAID-TIPS in November . Printed copy will be available January 2006.

2. Incorporation of DOTS into the pulmonary fellowship program and diplomate examination.

Dr. Vincent Balanag Jr. presented to the Executive Committee of the PCCP during its regular meeting in June 2005 a proposal for the mechanisms and procedures that may be adopted in order to successfully integrate DOTS in the Pulmonary Fellowship Training Program.

Proposals to the Executive Board included:

1. A resolution supporting the development of a DOTS training module for pulmonary fellows-in training;

2. A resolution endorsing to the Accreditation Committee the formulation of guidelines on the inclusion of basic DOTS lectures and a clinical rotation in a DOTS center as a requirement for accreditation of pulmonary fellowship training programs and as a prerequisite for completion of training.

3. A resolution endorsing to the Specialty Board the inclusion of DOTS as one of the essential topics under tuberculosis, the NTP Manual of Procedure as a required reading material, and of a minimum number questions on DOTS in the specialty examinations

4. A resolution endorsing to the FEE Committee the inclusion of DOTS as one of the essential topics under tuberculosis to be reviewed by trainees and the inclusion of a minimum number of exam questions on DOTS in the FEE.

Dr. Balanag suggested that the formulation of the actual guidelines for the implementation of the DOTS integration should include inputs from the Chairs and Training Officers of the Training Institutions, and the Accreditation Committee, FEE Committee and Specialty. However, he also forwarded the following proposals on possible requirements for the training fellowship:

1. Mandatory Attendance and Completion of Basic DOTS Course for Referring Physicians
2. Completion of a 40-hour DOTS rotation in an accredited DOTS unit
3. Attendance in TB Diagnostic Committee proceedings
4. The DOH Manual of Procedures and 2005 TB Consensus as required reading materials on TB

The PCCP Executive Board approved in principle the integration of DOTS into the Pulmonary Fellowship Training Program with the implementing guidelines to be discussed and finalized at a later date.

The PCCP had a Team Building Session at the GSK Office in Pasong Tamo Avenue last August 13, 2005. Participants included Chairman and/or Training Officers of PCCP-accredited training institutions, members of the Executive Committee. Aside from a revisiting of the PCCP Vision-Mission-Goals, the session involved the reassessment of the responsibilities of the Specialty Board, the Accrediation Committee, and the FEE Committee. Dr. Balanag was also invited to attend in order to include facilitate the incorporation of DOTS in the new guidelines to be adopted by these bodies. in that meeting, a proposal was made to create a Training Committee with the Training Officers as members to review and revise the requirements for the fellowship program. It was also decided that the Chairs of the Councils (including TB) should be included in the formulation of the requirements of the training programs, to ensure that the outputs of the Councils, especially the clinical practice guidelines, are incorporated in the training of the fellows.

As part of the initial efforts for the integration of DOTS in the training program, all current pulmonary fellows-in-training were required to attend a Basic DOTS Course for Referring Physicians conducted at the Lung Center on July 22 and 29, 2005 *(Please see Annex 7)*, if they have not previously attended one. At this time, all pulmonary fellows-in-training have already completed the requirement.

3. Basic DOTS Training for PCCP members (Annex 6).

The PCCP and its Council on TB have been very active in providing Basic DOTS Training for Referring Physicians to its members. It has done so during its Annual Conventions and Midyear Conventions. In the previous year, it conducted a DOTS Road Show which went as far north as Tuguegarao, Cagayan, east to Naga, Camarines and south to Aklan. During this period, it has provided Basic DOTS Training and certified more than a thousand physicians, many of which are PCCP members. These efforts has resulted in DOTS certification of about 2/3 of the active PCCP membership (fellows, diplomates and associates). For the current project, it targeted to train an additional 100 of the PCCP members. To meet these targets, it conducted 5 Basic DOTS Courses.

These were held on July 22, 2005 at 1-5 pm at the Lung Center; July 29, 2005 at 1-5 pm at the Lung Center, August 16, 2005 in the morning and again in the afternoon during the PhilCAT Convention, and in Tarlac City, Tarlac on August 26, 2005. All of these Basic DOTS Courses were held in cooperation with the Unilab Medical Education and Dvelopment (UMED) under Executive Director, Dr. Edgardo Ortiz, and Medichem Pharmaceuticals, Inc.

4. Participation of PCCP members in the establishment of local coalitions and in various DOTS activities.

PCCP participated in the formulation of Guidelines for Local TB Coalition Building through the attendance and active participation of its members in the meetings called for this purpose. The members include Drs. Dantes, Balanag and Obillo. *(Annex 8* contains the minutes of the meetings and workshops conducted for this purpose). It is to be mentioned that Dra. Victoria Dalay, the main architect for this Guideline for Local TB Coalition Building, will have the final draft copy of this guideline ready by October-November 2005.

PCCP has submitted the names of its official representatives for all TB-related activities in all regions of the country. The regional representatives are as follows:

Region 1	:	Jennifer Ann Mendoza-Wi, MD
		Joseph Benjamin Pastor, MD
Region 2	:	Ian Rhoderick Reyes, MD
		Delaila Pamittan, MD
Region 3	:	Sylvia Banal-Yang, MD
		Rosemarie Pingol, MD
Region 4	:	Gary Carlos. MD
		Ferdinand Feliciano, MD
Region 5	:	Tony Dy, MD
		Ma. Isabel Cano-Agarin, MD

Region 6	:	Ronnie Samorro, MD
		Malbar Ferrer, MD
Region 7	:	Leon James Young, MD
Region 8	:	Paula Theresa Sta. Maria, MD
Region 9	:	Mansueta Sabellina, MD
Region 10	:	Lu Jane Radaza, MD
		Fausto Tancongco, MD
Region 11	:	Parkash Mansukhani, MD
		Glenn Pono, MD
Region 12	:	Eileen Aniceto, MD
		Bai Naida Sinsuat, MD
CARAGA	:	Leo Paradiang, MD
CAR	:	Danilo Cacanindin, MD
		Ruel Revilla, MD
NCR	:	Vincent Balanag Jr., MD
		Ma. Consuelo Mison-Obillo, MD

PCCP nominated some of its members to attend the DOTS Certifier's Training Course held on August 16, 2005 during the PhilCAT Convention. They will be the core of the group to certify future PPMD Units to be established in their respective regions and provinces. Invited to attend were:

Ian Rhoderick Reyes	:	Region 2, Cagayan Province
Tony Dy	:	Region 5
Gary Carlos	:	Region 4-A, Cavite
Eileen Aniceto	:	Region 12, Iligan City
Sylvia Yang	:	Region 3, Nueva Ecija

PCCP members are leaders and active members in the new Local Coalitions that were established in the last few months

CATIMM (Metro Manila) : Lalaine Mortera, MD. et al.

Tacloban City Coalition Against TB : Teresa Paula Sta. Maria

Tarlac Coalition Against TB : Baby Grace Palma, et al

La Union Coalition Against TB : Dr. Valdez

5. Establishment of a TB Registry

The Philippine College of Chest Physicians (PCCP) has been considering the establishment of disease registries on common lung conditions as a means of obtaining useful information for training and research purposes. The different councils of the College have been given the task of developing their own disease registry with the assistance of the Council on Medical Informatics.

The PCCP through the initiative of its then President, Dr. Romy Bigornia, has included the establishment of a TB Registry as one of its projects to expand the involvement of its members and training institutions in TB–related activities in general and DOTS activities in particular. It envisions a web-based registry wherein PCCP-training institutions would contribute data from their TB patients, and this data will be made available to all interested parties for research and training purposes

It was fortunate that the Council on Tuberculosis has been offered the use of a newly-developed software for a TB registry system based on the forms that are used for

monitoring and reporting under the National TB Control Program (NTP). The web-based software has been previously developed as a thesis project for a bachelor's degree in computer science. Since the registry was based on forms used in DOTS Centers and several of the PCCP-accredited training institutions have functional DOTS Centers, the TB Council thought that it would be a good opportunity to use the registry in assisting the DOTS Centers in their monitoring and reporting responsibilities while providing the PCCP access to the cases seen in these centers. It is hoped that with the successful establishment of a TB Registry, registries for other lung diseases can be similarly started.

The current software is named *"The Philippine TB Patient Registry"* and has been designed to store information on all TB cases in a health facility, including information of baseline characteristics, sputum examination, treatment regimen and schedule of drug intake. In addition, it stores information on all health facilities in the system, including drug inventory and all users of the system like the system administrator, DOTS nurse or coordinator and the NTP Coordinator. It also provides general information on TB to all web users.

The software developer (Ms. Therese Camille Aquino) gave the TB Council a demonstration on the features of the TB registry on July 2005. The demonstration was attended by the chairman (Dr. Vincent Balanag Jr.) and several members of the TB Council, Dr. Renato Dantes (PCCP Vice-President and Chair of the Committee of Councils, and Dr Joel Sanchaguel, Chair of the Council on Informatics. The general assessment was that the registry would be adequate for storing all information required under the NTP. It was suggested, however, that chest x-ray findings should also be included in the data to be collected. It was decide that plans to incorporate the registry in DOTS centers of PCCP-accredited training institutions should be made. However, since the project will require substantial resources, it was also recommended that sources of funds to acquire the needed hardware, including the server, train prospective users in the DOTS centers and maintain the system should be identified. It was also recommended that the development of the system may be done in phases depending on the availability of funding.

In the meantime, funds are being solicited to compensate the software developer for the proposed use of the software. Initial funds might come from the TB Council of PCCP. Subsequent solicited funding will be used for the further development of the software which will include the following steps:

A. Revision and further refinement of the software.

1. Adding new data, including chest x-ray findings of patients
2. Removing some data, including name of patients (for reasons of privacy) and daily recording of drug intake (may not be relevant)
3. Incorporate mechanism to record possible transfer of patients from one center to another.

B. Use of the software by selected DOTS centers initially for electronic recording only (without internet connection yet). This will involve:

1. Identification of 2-5 pilot sites
2. Signing of MOA with administrators of the pilot sites
3. Acquisition of hardware like the personal computers for the pilot sites
4. Installation of the revised software
5. Training of DOTS center staff on the use of the software
6. Start of use of software for recording of Incoming TB patients

C. Connection of the users to the internet and installation of the web server.

1. Purchase of the server hardware, or as an initial alternative, borrowing space from a established server like Pfizer
2. Testing of the system by generating data summary form the included DOTS Centers

D. Connection of the pilot sites with DOH Central Office

1. Acquisition of hardware for the DOH Central Office
2. Training of personnel in the DOH Central office
3. Trial period of about 6 months wherein accumulated data from the pilot sites is summarized and analyzed in the DOH Central Office
4. Revisions and finalization of reporting processes

E. Establishment and interconnection of additional pilot sites

1. Identification of additional sites
2. MOA with administrators
3. Acquisition of hardware, training of staff

It was noted, however, that aside from the PCCP, several groups have been developing their own TB database for their own unique purposes. The PhilHealth has been reported to be developing their own registry for purposes of recording all TB patients registered under its own TB Outpatient Benefit Package. The UP Medical Informatics has also developed a database for all programs of the DOH being implemented in the local health centers, as a means of assisting midwives in their reporting requirements as well as a feedback mechanisms for them on how their programs are doing. The PhilCAT suggested that the different groups sit down and try to coordinate, if not to unify, their efforts on the TB registry. This recommendation is worthwhile pursuing.

C. Philippine College of Occupational Medicine (PCOM)

"PCOM is the premier specialty society and acknowledged authority in Occupational and Industrial Medicine and is one of the largest organizations of medical professionals in the

country. PCOM has in its mission the education and training of its members as well as the medical community. It is one of the most influential organizations in the country with its members as active educators and teachers in the higher medical educational institutions. PCOM through its chapters strategically located throughout the Philippines can be the focus and initiator of efforts to promote Private-Public Mix (PPM)-DOTS in their areas in partnership with the Department of Health (DOH) and other professional societies as well as local PhilCAT affiliates."(MOA PCOM,PHILTIPS, PHILCAT) With the forgoing in mind, PCOM designed its action plan anchored on the following pronouncements contained in the MOA with PHILCAT and PHILTIPS signed at the Century Park Manila, August 19, 2003:

(1) mobilize its members and resources toward the achievement of common goals and objectives of TB Control in the country;

(2) commit its membership particularly its local chapters in actively participating in the establishment of local PPM-DOTS coalitions and in the establishment of DOTS quality services in the provinces;

(3) assume a leadership role in the training and certification of DOTS referring physicians of its members treating TB as deputized by the PhilCAT;

(4) encourage its membership to participate in continuing quality improvement of DOTS services by referring patients to DOTS centers;

(5) partner with pharmaceutical industry supporters and such similarly supportive groups such as the Philippine TIPS in generating funding for dissemination, training and research activities;

(6) conduct joint conventions, seminars, training workshops especially for its members and incorporate DOTS into its training programs particularly its residency programs and diplomate examinations;

ACTIVITIES/RESULTS

The PCOM's action plan focused on four activities. The first one aimed to increase the number of members to be DOTS engaged physicians by conducting the basic DOTS training. The second focused on improving the training capabilities of PCOM to conduct the basic DOTS course by having selected members from among the different chapters to undergo trainors training. The third activity involved the establishment of Public-Private DOTS units in big industrial sites. This would facilitate the diagnosis and treatment of TB cases in workplaces. The fourth activity was to work with DOLE to come up with an updated consensus of TB in the workplace. This would serve as a guide for the implementation of policy and program on tuberculosis prevention and control in the workplace.

I. Basic DOTS Training for Referring Physicians

The PCOM organized five trainings in different provinces. This was partly funded by UMED and PhilTIPS. The resource persons who conducted the lectures came from the regional offices of DOH and Philhealth and from the local coalitions of PhilCAT. The following table shows the results of the training.

Date	Chapters
July 22	Negros Occidental, Iloilo and Panay
July 29	Northern Mindanao and Southern Mindanao
Aug 14	Soccsksargen
Aug 22	Olongapo and Pampanga
Aug 27	Cebu

(Please see Annex 9 for list of attendees to the PCOM workshops)

II. Training of Trainors

As initially envisioned, the PCOM wanted to build in-house capability to provide resource speakers to continue the basic DOTS training. However from the experience of other medical professional societies, it was noted that the trainors were not maximally utilized in the conduct of the basic DOTS training. It was decided by PCOM with PhilTIPS that in lieu of the trainors training, the budget will be used to formulate a training manual. This will contain the regular presentations required by DOH, PhilCAT and Philhealth but in addition include materials from the DOLE issuance on TB prevention and control in the workplace, the Philippine Business for Social Progress guide for companies in implementing DOTS, and PCOM's experience in establishing PPM-DOTS in industrial sites.

The PCOM has organized a committee to craft the manual based on the terms of reference *(Please see Annex 10)*

III. Establishment of PPM-DOTS units in big industrial sites

The PCOM engaged its chapters to explore the establishment of PPMD units in industrial sites. There were four areas that responded – Cavite, Subic, Batangas, and Amkor Anam. The industrial clinics in these sites sent their doctors and nurses to attend the DOTS

provider's training and medical technologists for the training in sputum microscopy *(Please see Annex 11)*

Provider's Training:

a. Dr. Ma. Magnolia M Morante
b. Ms. Ma. Cecilia Trias
c. Dr. Joselito Ramos
d. Ms. Lindy Tagle
e. Dr. Arcely Layson
f. Ms. Aida Visey
g. Dr. Jacqueline Abola
h. Ms. Clemencia Villapa

Sputum Microscopy Training

a. Ms. Edella Sabale (Cavite)
b. Ms Joselyn Fedili (Batangas)
c. Jocelyn Javier (Subic)
d. Patricia Lou Mendoza (Amkor Anam)

A draft MOA was done to formalize the agreements among the different stakeholders (PhilCAT, PhilTIPS, PCOM, Industrial site) to establish PPMD units in industrial sites. The MOA was transmitted to these stakeholders for their comments. So far only PhilCAT has given their comments, one among them is to include DOH in the MOA *(Please see Annex 12)*

To facilitate the establishment of the PPMD units and its certification by the DOH, PCOM was given a copy of the pre-assessment guidelines.

IV. Updated TB consensus in the workplace

The Department of Labor and employment issued Department Order 73-05 *Guidelines for the implementation of Policy and Program on Tuberculosis Prevention and Control in the Workplace.* This issuance enjoins all work establishments to implement a policy to cover the prevention, treatment, rehabilitation, compensation, and restoration to work of TB cases. The PCOM was tasked by the DOLE to disseminate Dept. Order 73-05. The PCOM undertook this task by incorporating the orientation on the dept order with its basic DOTS training. The first such training was held on July 19, 2005 at the OHSC office and subsequently, trainings in the provinces the continued the orientation. *(Please see Annex 13 for attendance list to the July 19, 2005 training)*

D. Philippine College of Physicians (PCP)

1. Incorporation of DOTS in the IM residency program and specialty examinations

Discussions were held with the heads of Accreditation Committee and Specialty Board of PCP regarding the inclusion of NTP (including DOTs) in the training program and specialty examinations of internists. Eventually, on October 12, 2005, the PCP Board of Regents, during the Midyear Annual Convention in Davao, reaffirmed PCP's commitment to the TB Covenant with PhilCAT and PhilTIPS (Annex 14).

In the meantime, a Manual on TB Management in the Philippine Setting – A Clinician's Guide *(Annex 15* has been developed for use as a standard reference material for IM residents and for possible use also as source of items for the specialty examinations.

A teaching module on tuberculosis will also be submitted. This will be Powerpoint slides of the TB Manual which may be used in lectures or small group discussions on TB diagnosis and treatment for IM residents

2. Mobilization of PCP local chapters for local coalition and other DOTS activities

Initial work has been done during the Workshop for DOTS-engaged physicians in Shangrila EDSA Plaza Hotel *(Please see Annex 16 for list of PCP attendees to DOTs workshop).*

The PCP Board has also communicated to the chapter heads PCP'c reaffirmation of its commitment to TB DOTs and the chapters have been encouraged to pursue activities related to TB DOTs in their areas.

E. Philippine Pediatric Society (PPS)

1. PPS CPG on TB - This is part of the implementation of the Medical Professional Societies' Action Plan as a result of the covenants forged between PhilCAT, Philippine TIPS and the Philippine Pediatric Society (PPS) as one of the six professional societies. Basically the development of this Clinical Practice Guideline would support the aim of ensuring quality improvement of TB management in the country including the practice of DOTS. The involvement of PPS would help internalize and heighten the involvement of pediatricians in TB control.

BACKGROUND

Tuberculosis is one of the world's most neglected health crisis. Inspite of its alarming danger, surprisingly little action has been taken to address the TB epidemic. TB has been a low priority in the world's health agenda. After decades of decline, tuberculosis has emerged as a global health challenge. Currently, TB is the single biggest infectious killer of youth and adults causing between 2 to 3 million deaths each year.

Tuberculosis remains as an important cause of morbidity and mortality both in developed and developing country. In 1991, the World Health Organization (WHO) estimated that children <15 years of age in developing countries represents 1.3 million cases and 450,000 deaths annually from TB. They are also at greatest risk for dissemination and extra-pulmonary complications.

In the latest Philippine Health Statistics of 2002, pulmonary tuberculosis was the 6th leading cause of morbidity for all age groups (143.7/100000) and also the 6th leading cause of mortality (36.1/100000) accounting for 7.5% of all deaths reported. Children <15 years of age accounted for 11.4% of the total number of pulmonary TB in the country.

Based on statistics from the PPS in 1998, pulmonary TB ranked 10th in the leading causes of morbidity.

Childhood TB is considered a sentinel event, signifying recent and on-going transmission of TB in a community. An accurate and precise diagnosis of tuberculosis in children is essential in order to provide effective treatment and to detect an undiagnosed adult source case who has infected the child. Unlike in adults, establishing the diagnosis of TB in children is difficult, complex and remains a challenge despite recent advances in mycobacteriology and PCR technology. Despite the significance of diagnosing TB in children most cases are diagnosed based on epidemiological (demographic, contact information), and/or clinical grounds (clinical presentation, P.E. findings, and radiographic evidence) and cultures are rarely available because in children unlike adults, tubercle bacilli usually are relatively few in numbers and sputum cannot be obtained from children younger than 6 years.

Given that unlike adults, the diagnosis of TB in children is difficult and often based on epidemiological and/or clinical grounds and cultures are rarely available, and that treatment of TB in children on the other hand has undergone many changes over the past decades, these may result in substandard of care on one end of the spectrum and on the other end can lead to over diagnosis and/or over treatment which may lead to adverse reactions and unnecessary or increased cost. Thus the Clinical Practice Guidelines on TB in Children was initiated.

The following objectives addresses the concerns previously mentioned:

- To provide an evidence-based guideline that defines the acceptable standards of care of TB in children
- To provide a guide indecision-making among policy makers
- To empower patients by providing the correct information
- To provide a framework and educational materials for training of students, residents, nurses, pharmacists and medical technologists
- To assist and provide a guide for PhilHealth, HMOs and other third party insurers for a cost-effective use
- To provide a framework for monitoring side effects of treatment
- To identify research gaps

This initial CPG may not be able to address all of the objectives but it is envisioned that this will evolve and be talked in the next few years to come.

Methodology of CPG Development

This technical report is the summary of the reviewed scientific articles on the diagnosis, treatment and prevention of tuberculosis in children. Tuberculosis was subdivided into two main topics, pulmonary and extra-pulmonary. Extra-pulmonary TB was limited to the following sites which are the most common ones encountered in pediatrics: lymph nodes, CNS, and bone (spine and joints).

To find studies addressing the specific clinical issues, a computerized literature search through electronic data base of Medline and PubMed was conducted. Articles were retrieved dating back to 1966 to July 2005 using MeSH terms and keywords (such as 'Pulmonary tuberculosis and anti-tuberculosis drugs', 'tuberculosis prevention', 'BCG vaccination', 'Pott's disease', 'tuberculous joints', to name a few) and publication type (randomized controlled trials or clinical trials). Studies conducted in children aged 0-18 years old were included. The Cochrane Central Register of Controlled Trials (Cochrane Library Issue 4, 2004) was utilized as well as for the search of related literatures. Local as well as foregn abstracts and full articles were retrieved; however, foreign literatures

without English translation were excluded in the review. Bibliographies of the articles retrieved were also reviewed. Some of the local studies conducted in the Philippines were taken from the Book of Abstracts compiled by the Philippine Pediatric Society, as well as through personal communications with principal authors.

Based on the clinical evidence from the scientific literature, a set of draft recommendation statements for TB diagnosis, treatment, and prevention were formulated by each group and were then presented to the En Banc meeting composed of the Presidents or representatives of relevant societies, Chairperson of the Pediatric Department of various institutions, stakeholders and the Advisory Board. During the En Banc meeting which was held last August 2005, inputs, comments and recommendations made by the committee were gathered, and consensus issues were raised. Revisions of the respective recommendations were drafted accordingly.

There are few limitations of this search though. Some of the limitations include: selected database (Medline), only articles in the English language were included, included articles were from available journals only.

The final draft of the guideline will have to be presented in a public forum sometime in the third week of October before the final printing can be made.

Attached is a copy of the final draft *(Annex 17).*

CLINICAL PRACTICE GUIDELINE ON TUBERCULOSIS IN CHILDREN

MEMBERS

Core Group:

Chair: Dr. Salvacion R. Gatchalian

Coordinator: Dr. Ma. Asela Catalla

Group on Diagnosis:

Chair: Dr. Jaime Santos

Members:

Dr. Cristan Cabanilla

Dr. Eva Dizon

Dr. Girlie Geronimo (Research Assistant)

Dr. Antonette Madrid

Dr. Beatriz Mandanas

Group on Treatment:

Chair: Dr. Liza Gonzales

Members:

Dr. MaryAnn Banez

Dr. Maryann Bunyi

Dr. Joanne de Castro

Dr. Dennis Garcia

Dr. Telly How

Dr. Anna Ong-Lim

Dr. Marissa Lukban

Dr. Emy Luna

Dr. Carmen Nievera

Dr. Marimel Pagcatipunan

Dr. Arnel Suratos

Dr. Tisha Torres-Briola (Research Assistant)

Dr. Cecile Untalan

Group on Prevention:

Chair: Dr. Josefina Carlos

Members:

Dr. Gyneth Bibera

Dr. Doris Chua

Dr. Mayette Claudio

Dr. Fatima Gimenez

Dr. Melba Masigan

Dr. Leilani Pichay-de la Pena (Research Assistant)

Dr. Anna Putulin

Dr. Ana Maria Reyes

2. Training on DOH Guidelines for Implementing Tuberculosis Control Program in Children

In October 27, 2004 an Administrative Order was issued on Guidelines for Implementing Tuberculosis Control Program in Children. The Philippine Pediatric Society being a partner of the Department of Health joins the Department in the implementation for the TB Control Program to ensure quality improvement in the diagnosis and management of TB in children particularly using DOTS to decrease morbidity and mortality due to TB in the pediatric population.

It is therefore imperative that the pediatricians be aware and knowledgeable of the TB Control Program in Children and be able to implement as well as train other physicians and health workers in DOTS therapy.

As part of the commitment of PPS, a training of trainors shall be conducted either simultaneously with the training of the Department of Health or soon after. The training shall commence as soon as all the drugs and PPD are available in the Department of Health's TB Control Program.

The training shall involve the introduction of the procedural guidelines:

- Registration and initiation of treatment
    - Inform mother child has TB
    - Refer child to medical officer for pre-treatment
    - Treat patient using the recommended treatment regimen
    - Open treatment card and register in NTP TB register
    - Refer patient back to BHS where child will undergo supervised treatment
- Ensuring treatment compliance through DOTS
    - Explain importance of treatment to mother
    - Give child drugs daily. Every am child should report to health center or house of BHW/volunteer to take medicines in front of treatment partner. After intake of drugs, treatment partner signs treatment card/ID card
    - Saturday, Sundays and holidays, treatment done at home, supervised by mother. If treatment partner is a volunteer, daily supervised treatment could be done on holidays and weekends
    - Treatment partner motivate TB patient or mother/father emphasizing key messages:
        - TB is curable but must take all drugs daily w/o fail for prescribed duration
        - Undergo follow-up exam monthly
    - Should child fail to report on day expected, efforts made to retrieve immediately
- Monitoring of response to treatment
    - Monthly follow-up to check:
        - Improvement of appetite /well-being
        - Weight gain
        - Persistence or disappearance of signs and symptoms
        - Skin, sclera checked

- Liver, spleen and lymph node palpated
- At the end of treatment, another chest X-ray taken

Training shall be for a duration of at least 4 days since this will include PPD reading skill. The proposed training shall be as follows:

Day 1

- Registration
- Opening Ceremony
- Introduction of Technical Guidelines: Policies, Procedures on Case Finding, DOTS, Case Holding and Diagnosis
- Lecture on Tuberculin Testing
- Field Demonstration on Tuberculin Testing

Day 2

- Lecture on Module I – Diagnosis
- Lecture on Module II on treatment

Day 3

- Lecture on Ensuring treatment
- Lecture on Monitoring treatment response and recording and reporting
- Lecture on Module III on Monitoring
- Lecture on Prevention

Day 4

- Tuberculin reading
- Analysis and questions
- Open forum

The DOTS program shall help physicians especially pediatricians in enhancing basic knowledge and management of TB in Children using the DOTS therapy.

Although childhood TB has a limited role in the transmission of TB, its occurrence indicates ongoing transmission of infection and contributes to a pool from which TB may arise in the future. Healthy adults who are infected with TB bacilli have only a 10-15% chance of developing the disease in their lifetime. In contrast, up to 50% of infants will develop the disease within 3-9 months of infection, while 25% of children 1-5 years of age and 15% of adolescents will develop the disease within 1-2 years of infection.

Plans of PPS for DOTS

PPS, through the Committee on Tuberculosis aims to actively be involved in the diagnosis, management and prevention of TB in the whole country. It does this by coordinating with the other subspecialty socities like PIDSP, PAPP, PAFP, and PhilCAT in the strategic planning of activities like screening, diagnosis, and treatment as well as education of the patients, caretakers and health workers.

In order to achieve the targets for TB control in the face of new challenges, TB programs need to be straigthened significantly. (WHO 2003)

A surge in drug resistant TB requires effective implementation of the DOTS strategy as well as measure to cure existing multi-drug resistant TB (MDR) cases. The expanded DOTS framework reinforces the five essential components of the DOTS strategy:

- Sustain practical commitment to increase human and financial resources and make the control a nationwide priority integral to the national health system
- Access to quality assured TB sputum microscopy for case detection among persons presenting with or found through screening to have symptoms of TB
- Standardized Short Course Chemotherapy for all cases of TB under proper care management condition including direct observation of treatment
- Uninterrupted supply of quality assured drugs with reliable drug procurement and distribution system

- Recording and reporting system enabling outcome assessment of all patients and assessment of overall program performance

The Philippine Pediatric Society is committed to enforce the DOTS strategy to improve the quality of TB management particularly in the pediatric population. Although childhood TB has a limited role in the transmission of tuberculosis, its occurrence indicates ongoing transmission of infection and contributes to a pool from which TB may arise in the future. Healthy adults who are infected with TB bacilli have only a 10-15% chance of developing the disease in their lifetime. In contrast, up to 50% of infants will develop the disease within 3-9 months of infection, while 25% of children 1-5 years of age, and 15% of adolescents will develop disease within 1-2 years of infection. To be able to implement this, the following have been and will be undertaken:

- Institutionalization of pediatric DOTS in residency training and specialty board examination.

  In the Pediatric Residency Program DOTS has not been emphasized. With the commitment of the PPS to ensure high quality improvement in the management of TB in children, the Board of Trustees in a meeting held last July 2005 is committed to incorporate DOTS into its residency training program and to include in the PPS Diplomate examination.
- Training of TB Program Management

  Two of our members have undergone this training with PhilTips providing support.
- Establishing Consensus on the diagnosis and management of TB in Children consistent with NTP

  Instead of updating the consensus it has been decided upon to instead develop Clinical Practice Guidelines on TB in Children. This was also made possible through the assistance of PhilTips through PhilCAT.

Presently, there are some accredited PPS institution, like UST hospital which is a pioneer in the establishment of a DOTS Clinic since 1998. The UP-PGH Department of

Pediatrics has been doing DOTS as well initially as a research program but has now expanded as a DOTS Clinic servicng patients discharged from the hospital living within the area around the hospital. This clinc however is not yet accredited and are in the process for accreditation.

Likewise, PPS is actively involved in research for screening and diagnosis of TB in children. Currently a research protocol is being prepared to compare the 2 TU RT 23 PPD which will be used by the DOH for the NTP in children vs. the f5 TU PPD-S. Researchers have likewise been made comparing three drugs vs. four drugs regimen in TB in children. As mentioned previously, a Clinical Practice Guideline has been accomplished with the participation of different subspecialties.

All of the above are geared towards the control of the further outbreak of this ancient disease in the Philippines.

F. Philippine Society of Microbiology and Infectious Diseases (PSMID)

1. Establishment of a hospital-based PPM DOTS Unit in a PSMID-accredited hospital

Target is the establishment of a functional PPMD Unit in UP-PGH, a hospital with a fellowship training program in Infectious diseases. The PGH Employees Clinic is being developed as a DOTS Unit, initially to serve PGH patients, but later to be expanded to include patients seen in the catchment area of PGH. Certification training on DOTs Provider have been attended by members of the units (Family medicine physicians, pulmonoligists and nurses) *(Annex 18)* . Microscopists in the Central laboratory of the hospital have undergone training on TB microscopy at RITM and other family medicine physicians and pulmonologist fellows-in-training have attended training for DOTS referring physicians. The unit is just awaiting visit from DOH for certification as PPMD clinic.

2. Capacity building for a DOTS Plus Center in a PSMID-accredited hospital.

Again the target here is the UP-PGH. Immediate establishment of a DOTS Plus Center is not possible at this stage since one of the most important prerequisite for the establishment of a DOTS Plus Center is a functional and efficient DOTS Clinic. However, the idea was already broached to the Tropical Disease Foundation through Dr. Quelapio who agreed that this can be pursued in the future once the PGH DOTS Clinic is certified and accredited, and fully operational.

In the meantime, it is suggested that PSMID be officially represented (just like PCCP) in the DOTS Plus Task Force as a way of paving the way for the active involvement of PSMID once the PGH DOTS Unit is operational.

3. Incorporation of DOTS in fellowship training and specialty examinations

The matter has already been presented by Dr. Jaime Montoya to the PSMID Executive Board. The Board has already approved in principle the DOTS integration. Likewise, examination items on DOTS have already been included in the previous specialty board examinations of PSMID.

What remains to be done is to formulate guidelines for the implementation of DOTS integration into fellowship training program and specialty examinations. While it is up to the PSMID Board to determine the requirements for completion of fellowship training with regard to DOTS, the following will be proposed:

1. Mandatory completion of the Basic DOTS Course for Referring Physicians
2. Rotation in an accredited DOTS Center (may be 40 hours as recommended in PCCP)
3. Participation in microscopy quality assurance activities

As regards the inclusion in the specialty examinations of items on DOTS, the current president of PSMID has verified that DOTs will be included in the upcoming specialty board examination of PSMID.

It is suggested that there should be standard reference material(s) on the topic that the trainees should read. This may include the DOH Manual of Procedures, the updated TB Consensus, or a special handbook or manual can be made as a new standard reference (similar to the one mentioned under PCP)

4. Training of PSMID members on Basic DOTS

PSMID members participated in the DOTS Workshop in Shangrila EDSA Plaza *(Please see Annex 19),* a few more participated in the two (2) DOTS Workshops during the PhilCAT Annual Convention *(Please refer back to Annex 6).*